

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 800167WO		Transmittal of International Search Report 20) as well as, where applicable, item 5 below.				
International application No.	International filing date (day month year)	(Earliest) Priority Date (day month year)				
PCT/FI 03/00499	18 June 2003	20 June 2002				
Applicant	20 June 2005					
Nokia Corporation et al						
This international search report has applicant according to Article 18. A	peen prepared by this International Searchi copy is being transmitted to the Internation	ng Authority and is transmitted to the all Bureau.				
This international search report cons	ists of a total of 3 sheets.	•				
X It is also accompanied by	a copy of each prior art document cited in	n this report.				
1. Basis of the report						
a. With regard to the language, the in the language in which it was	ne international search was carried out on t filed, unless otherwise indicated under this	the basis of the international application sitem.				
the international search v to this Authority (Rule 2)	was carried out on the basis of a translation $3.1(b)$ ).	of the international application furnished				
	and/or amino acid sequence disclosed in the d out on the basis of the sequence listing:	international application, the				
contained in the internati	onal application in written form.					
filed together with the int	ernational application in computer readabl	e form.				
furnished subsequently to	this Authority in written form.					
furnished subsequently to	this Authority in computer readable form.					
	sequently furnished written sequence listing ion as filed has been furnished.	g does not go beyond the disclosure in				
the statement that the inf	ormation recorded in computer readable fo	orm is identical to the written sequence				
2. Certain claims were found	d unsearchable (See Box I).					
3. Unity of invention is lack	ing (See Box II).	-				
4. With regard to the title,						
χ the text is approved as su	bmitted by the applicant.	;				
the text has been establish	ned by this Authority to read as follows:					
		·				
5. With regard to the abstract,  \[ \times \] the text is approved as submitted by the applicant.						
<u> </u>	ned, according to Rule 38.2(b), by this Aut	hority as it appears in Box III. The				
applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.						
6. The figure of the drawings to be published with the abstract is Figure No3						
X as suggested by the applicant fail		None of the figures.				
because the applicant fail		·				
because this figure better	characterizes the invention.					

### A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H03M 13/27
According to International Patent Classification (IPC) or to both national classification and IPC

#### **B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H03M, H04L, H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

#### SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

### EPO-INTERNAL, WPI DATA, PAJ, INSPEC

Further documents are listed in the continuation of Box C.

C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
х	LEI, Sai-Weng et al. "Performance analysis of adaptive interleaving for OFDM systems". IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, May 2002, Vol. 51, No. 3, pages 435-444, ISSN: 0018-9545, INSPEC AN: 7292092, see section III, "Adaptive Interleaving".	1-5,7-10		
A	US 2002044612 A1 (SIPOLA, J.), 18 April 2002 (18.04.02), abstract	1-10		
A	EP 0980162 A1 (NOKIA MOBILE PHONES LTD.), 16 February 2000 (16.02.00), abstract	1-10		

*	Special categories of cited documents:	"T"			
"A"	document defining the general state of the art which is not considered to be of particular relevance		date and not in conflict with the application but cited to understand the principle or theory underlying the invention		
"E"	earlier application or patent but published on or after the international filing date	"X"	document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive		
"L"	L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other		step when the document is taken alone		
1	special reason (as specified)	"Y"	document of particular relevance: the claimed invention cannot be		
″0″	document referring to an oral disclosure, use, exhibition or other means		considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art		
"P"	document published prior to the international filing date but later than the priority date claimed	سيع."	document member of the same patent family		
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Date	Date of the actual completion of the international search		Date of mailing of the international search report		
			0 2 -09- 2003		
			0 2 00 2000		
1	Sept 2003				
Nan	ne and mailing address of the ISA/	Autho	rized officer		
Swedish Patent Office					
Box 5055, S-102 42 STOCKHOLM		Markus Stålö /OGU			
Face	simile No. +46 8 666 02 86	Teleph	none No. +46 8 782 25 00		

See patent family annex.

INTERNATION SEARCH REPORT

Form PCT/ISA/210 (continuation of second sheet) (July 1998)

Internal application No. PCT/r1 03/00499

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
A	WO 9907076 A2 (SAMSUNG ELECTRONICS, LTD.), 11 February 1999 (11.02.99), abstract	1-10	
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# INTERNATIONAL SEARCH REPORT Information on the family members

26/07/03

Interpolation No.
PC17FI 03/00499

	atent document in search report		Publication date		Patent family member(s)	Publication date
US	2002044612	A1	18/04/02	AU EP FI FI FI WO	2852901 A 1169779 A 4671 U 108822 B 20000312 A,V 0161869 A	27/08/01 09/01/02 25/10/00 00/00/00 15/08/01 23/08/01
ΞP	0980162	A1	16/02/00	FI FI US	106491 B 981744 A 6563884 B	00/00/00 13/02/00 13/05/03
WO	9907076	A2	11/02/99	BR CN EP JP RU US	9811299 A 1264509 T 0997031 A 2001512914 T 2193276 C 6289486 B	05/12/00 23/08/00 03/05/00 28/08/01 20/11/02 11/09/01